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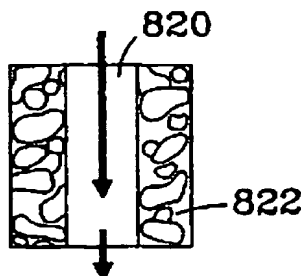
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(54) Title: **A CHEMICAL REACTOR AND METHOD FOR GAS PHASE REACTANT CATALYTIC REACTIONS**



(57) Abstract: The present invention provides chemical reactors and reaction chambers and methods for conducting catalytic chemical reactions having gas phase reactants. In preferred embodiments, these reaction chambers and methods include at least one porous catalyst material that has pore sizes large enough to permit molecular diffusion within the porous catalyst material.

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